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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/809,476

03/26/2004

Hiromi Hoshino

SON-2972

8328

23353 7590 04/13/2009  
RADER FISHMAN & GRAUER PLLC  
LION BUILDING  
1233 20TH STREET N.W., SUITE 501  
WASHINGTON, DC 20036

EXAMINER

SELBY, GEVELL V

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

04/13/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/809,476	<b>Applicant(s)</b> HOSHINO ET AL.	
	<b>Examiner</b> GEVELL SELBY	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 10-12, 14, 17-25 and 27-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-12, 14, 17-25 and 27-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 10-12, 14, 17, and 18 have been considered but are moot in view of the new ground(s) of rejection.

2. Applicant's arguments filed 1/28/09 have been fully considered but they are not persuasive regarding claims 19-25, and 27-29. The applicant submits the prior art does not disclose the following limitations of the claimed invention:

a display for displaying the synthesized video signal synchronously with the real-time video captured by said imaging apparatus, as stated in claim 19;

the image capture apparatus includes a display adapted to display the meta-data of the captured video content synchronously with the real-time video captured by the image capture apparatus, as stated in claim 25. The Examiner respectfully disagrees.

Examiner's Reply:

Re claim 19 and 25) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., metadata of stored video) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The claim states displaying the meta-data of the captured video content; however captured video is not the same as stored video since real-time video is also captured by the image sensor; therefore, meta-data of current video content reads on metadata of the captured video content. The Okazaki reference discloses the image capture apparatus includes a display (see

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figure 1, element 46) adapted to display the meta-data of the captured video content synchronously with the real-time video captured by the image capture apparatus (see figure 2B). The display displays the synthesized video signal synchronously with the real-time video since the synthesized video is real-time video.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**4. Claims 19, 20, 23, 25, 27, and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Okazaki, US 2004/0174451.**

In regard to claim 19, Okazaki, US 2004/0174451, discloses a meta-data display system for displaying meta-data related to a video signal, comprising:

an imaging apparatus (see figure 1, element 10) that captures video content and generates the video signal and meta-data (character data) associated with each frame of the video signal, and having a display (see figure 1, element 46) adapted to display the meta-data of the captured video content synchronously with the real-time video captured by the imaging apparatus (see para 23-32: the image sensor 16 of the imaging apparatus captures image data, video data and

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character data or metadata is then generated and combined to display on the LCD 46);

a meta-data addition apparatus (see figure 1, element 42) that receives the meta-data and the video signal and combines the meta-data associated with each frame of the video signal and the video signal, and outputs a combined video signal (see para 32: the character combining circuit 42 or meta-data addition apparatus combines the character data with the image data);

a storage device (see figure 1, element 52) for storing the combined video signal (it is inherent the recording medium of the reference can be used for storing the combined video signal, since the structure of the storage device is disclosed);

a meta-data synthesis apparatus (see figure 1, element 44) that synthesizes the combined video signal to produce a synthesized video signal, the synthesized video signal including the video signal where each frame is visually combined with at least a portion of the meta-data associated with that frame (see para 32: the encoder 44 or the meta-data synthesis apparatus synthesizes the combined video signal and transfers it to the LCD 46 for display);

a display (see figure 1, element 46) for displaying the synthesized video signal synchronously with the real-time video captured by said imaging apparatus; and (see para 32: the synthesized video signal include the real-time video);

wherein the imaging apparatus receives the combined video signal from the meta-data addition apparatus, and the display on the imaging apparatus displays the meta-data from the combined video signal (see figure 2B).

In regard to claim 20, Okazaki, US 2004/0174451, discloses the meta-data display system of claim 19, wherein the display apparatus is a component of the imaging apparatus (see figure 1).

In regard to claim 23, Okazaki, US 2004/0174451, discloses the meta-data display system of claim 19, wherein the meta data added to the video signal is packed into one or more meta-data groups provided for different purposes of utilizing the meta-data (see para 30: the character data or meta data is in the group of exposure information).

In regard to claim 25, Okazaki, US 2004/0174451, discloses a meta-data display system, comprising:

a meta-data synthesis apparatus (see figure 1, elements 42 and 44 in combination) for extracting at least a part of the meta-data associated with every frame of a video signal and synthesizing the extracted meta-data with the video signal to produce a synthesized video signal (see para 32: the combining unit 42 part of the meta-data synthesis apparatus extracts and meta data and its associated video data from the buffer and transfers it to the encoder 44 part of the meta-data synthesis apparatus that synthesizes the combined video signal and transfers it to the LCD 46 for display with every video frame); and

an imaging image capture apparatus (see figure 1, element 10) for generating the video signal and the meta-data for every frame of the video signal; wherein in the synthesized video, each video frame is visually combined with meta-data associated with that video frame, and the synthesized video signal is transmitted to the imaging apparatus (see para 23-32: the image sensor 16 of the

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imaging apparatus captures image data, video data and character data or metadata that is then generated and combined to display on the LCD 46); and

the image capture apparatus includes a display (see figure 1, element 46) adapted to display the meta-data of the captured video content synchronously with the real-time video captured by the image capture apparatus (see figure 2B).

In regard to claim 27, Okazaki, US 2004/0174451, discloses the meta-data display system of claim 25, wherein the meta-data added to the video signal includes scene-information meta-data, which is meta-data related to a scene shot by the imaging apparatus (see para 30: the character data or meta data is scene information of the exposure of the scene imaged).

In regard to claim 29, Okazaki, US 2004/0174451, discloses the meta-data display system of claim 25, wherein the meta-data added to the video signal is packed into one or more meta-data groups for different purposes of utilizing the meta data (see para 30: the character data or meta data is in the group of exposure information).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 10-12, 14, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada, US 5,592,301, in view of Arai et al., US 6,130,717.**

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In regard to claim 10, Shimada, US 5,592,301, a video-signal recording/reproduction apparatus comprising:

a recording unit (see figure 1, elements 4, 6, and 7) for recording a video signal generated by an imaging apparatus as a video signal with every frame thereof including additional meta data related to said video signal onto a recording medium (see figure 1, element 6) (see column 2, line 31-38 and 65+: the system controller 7 controls the recording of video signals combined with meta-data from the first character generator 11); and

a meta-data synthesis apparatus (see figure 1, element 14) for extracting at least a part of said meta data from said video signal including said meta data added to every frame and synthesizing said extracted part with said video signal (see column 3, lines 1-11: the image signal and metadata are added together for each frame and displayed on the EVF 14);

wherein said imaging apparatus receives, from said recording unit, said video signal including said meta data and displays said meta-data, from said video signal, at the imaging apparatus synchronously as the video signal is recorded by the recording/reproduction unit (see column 3, lines 41-49: the metadata such a elapsed time is displayed on the EVF 14 while the video signals are being recorded into the recording portion 6).

The Shimada reference does not disclose the recording unit is also a reproducing unit for reproducing the video signal from the recording medium. It would have been obvious to one of ordinary skill in the art to have a recording/reproduction unit.



Arai et al., US 6,130,717, discloses a digital camera with a moving image recording mode that that records images in a video recorder section (see figure 8, element 225) and a video recorder mode that allows reproduction of recorded images from the recorder section to be displayed on a display 223 (see column 19, lines 12-30).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify the recording unit and display of the Shimada reference in view of the Arai reference to have a recording/reproduction unit for recording and reproducing a video signal generated by an imaging apparatus as a video signal with every frame thereof: including additional meta data related to said video signal onto and from a recording medium, in order to quickly and easily review images captured by the camera.

In regard to claim 11, Shimada, US 5,592,301, in view of Arai et al., US 6,130,717, discloses the video-signal recording/reproduction apparatus according to claim 10. The Shimada reference discloses wherein said meta data added to said video signal is packed into one or more meta-data groups provided for different purposes of utilizing said meta data (see column 2, lines 65-67: groups of date, time, and counter value).

In regard to claim 12, Shimada, US 5,592,301, in view of Arai et al., US 6,130,717, discloses the video-signal recording/reproduction apparatus according to claim 10, wherein it is implied the metadata synthesis apparatus of display of the Shimada and Arai combination extracts at least a part of said meta data from said video signal reproduced by said recording/reproduction unit from said recording medium and

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synthesizes said extracted part with said reproduced video signal, since the video data saved in the storage was combined with metadata and the stored combined image would be reproduced and displayed for review by the user.

In regard to claim 14, since Shimada, US 5,592,301, in view of Arai et al., US 6,130,717, discloses the video-signal recording/reproduction apparatus and its operation as described above in regard to claim 10, the method of claim 14 is also disclosed (see claim 10 above).

In regard to claim 17, since Shimada, US 5,592,301, in view of Arai et al., US 6,130,717, discloses the video-signal recording/reproduction apparatus and its operation as described above in regard to claim 11, the method of claim 17 is also disclosed (see claim 11 above).

In regard to claim 18, since Shimada, US 5,592,301, in view of Arai et al., US 6,130,717, discloses the video-signal recording/reproduction apparatus and its operation as described above in regard to claim 12, the method of claim 18 is also disclosed (see claim 12 above).

**7. Claims 21, 22, 24, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okazaki, US 2004/0174451, in view of Currans, US 2005/0104976.**

In regard to claim 21, Okazaki, US 2004/0174451, discloses the meta-data display system of claim 19, wherein imaging apparatus includes a lens system (see figure 1, element 12). The Okazaki reference does not specifically disclose the lens system that produce lens setting meta-data; a positioning system that produces position meta-data, said position meta-data includes the position and orientation of the lens system relative to

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a scene; an input terminal for inputting scene-information meta-data; and wherein, the meta-data addition apparatus adds the lens setting meta-data, the position meta-data, and the scene-information meta-data to the video signal, to produce the combined video signal.

Currans, US 2005/0104976, discloses a meta data display system with a camera with lens system (see figure 2, element 203) that produces lens setting meta-data; a positioning system (see figure 2, elements 204, 206, and 207) that produces position meta-data, said position meta-data includes the position and orientation of the lens system relative to a scene (see para 24-25 and figure 8); an input terminal (see figure 1, element 104) for inputting scene-information meta-data; and wherein, the meta-data addition apparatus adds the lens setting meta-data, the position meta-data, and the scene-information meta-data to the video signal, to produce the combined video signal (see para 28-30: the camera of the system captures image data along with information from sensors and adds the information to the image data; additional metadata can be added to the image data and the video and metadata is display together on the computer display).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Okazaki, US 2004/0174451, in view of Currans, US 2005/0104976, to have the lens system that produce lens setting meta-data; a positioning system that produces position meta-data, said position meta-data includes the position and orientation of the lens system relative to a scene; an input terminal for inputting scene-information meta-data; and wherein, the meta-data addition apparatus adds the lens setting meta-data, the position meta-data, and the scene-information meta-

data to the video signal, to produce the combined video signal, in order to easily and quickly provide the user with additional information about captured scene.

In regard to claim 22, Okazaki, US 2004/0174451, in view of Currans, US 2005/0104976, discloses the meta-data display system of claim 21. The Currans reference discloses wherein the meta-data received by the meta-data addition apparatus is organized into one or more meta-data groups provided for each of the lens setting meta-data, the position meta-data, and the scene-information meta-data (see para 29-30).

In regard to claim 24, Okazaki, US 2004/0174451, in view of Currans, US 2005/0104976, discloses the meta-data display system of claim 19. The Okazaki reference discloses the meta-data display system include a video-signal recording/reproduction apparatus (see figure 1, element 50) for recording and reproducing the image data onto and from a recording medium (see para 36: the I/F 50 or recording/reproduction apparatus reads and writes the image data to the recording medium 52). The Okazaki reference does not disclose that the video-signal recording/reproduction apparatus for recording and reproducing the combined video signal onto and from a recording medium, wherein at least a part of the meta-data is extracted from the video signal reproduced by the video-signal recording/reproduction apparatus and synthesized with the video signal.

The Currans reference discloses a CPU 201 that reads and writes video data combined with metadata to and from the recording media 208 and the combined video is displayed together (see para 36 and 45).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Okazaki, US 2004/0174451, in view of Currans, US 2005/0104976, the video-signal recording/reproduction apparatus for recording and reproducing the combined video signal onto and from a recording medium, wherein at least a part of the meta-data is extracted from the video signal reproduced by the video-signal recording/reproduction apparatus and synthesized with the video signal, in order to save video data with meta data and display the combined signal at a later time or another location, so that the user may have the benefit of viewing the video over and over.

In regard to claim 28, Okazaki, US 2004/0174451, discloses the meta-data display system of claim 27, wherein imaging apparatus includes a lens system (see figure 1, element 12). The Okazaki reference does not specifically disclose the lens system that produce lens setting meta-data; a positioning system that produces position meta-data, said position meta-data includes the position and orientation of the lens system relative to a scene; an input terminal for inputting scene-information meta-data; and wherein, the meta-data addition apparatus adds the lens setting meta-data, the position meta-data, and the scene-information meta-data to the video signal, to produce the combined video signal.

Currans, US 2005/0104976, discloses a meta data display system with a camera with lens system (see figure 2, element 203) that produces lens setting meta-data; a positioning system (see figure 2, elements 204, 206, and 207) that produces position meta-data, said position meta-data includes the position and orientation of the lens system

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relative to a scene (see para 24-25 and figure 8); an input terminal (see figure 1, element 104) for inputting scene-information meta-data; and wherein, the meta-data addition apparatus adds the lens setting meta-data, the position meta-data, and the scene-information meta-data to the video signal, to produce the combined video signal (see para 28-30: the camera of the system captures image data along with information from sensors and adds the information to the image data; additional metadata can be added to the image data and the video and metadata is display together on the computer display).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Okazaki, US 2004/0174451, in view of Currans, US 2005/0104976, to have the lens system that produce lens setting meta-data; a positioning system that produces position meta-data, said position meta-data includes the position and orientation of the lens system relative to a scene; an input terminal for inputting scene-information meta-data; and wherein, the meta-data addition apparatus adds the lens setting meta-data, the position meta-data, and the scene-information meta-data to the video signal, to produce the combined video signal, in order to easily and quickly provide the user with additional information about captured scene.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GEVELL SELBY whose telephone number is (571)272-7369. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on 571-272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Lin Ye/

Supervisory Patent Examiner, Art Unit 2622

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